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TAYLOR ENERGY COMPANY LLC

IBLA 2015-207

Decided October 30, 2018

Appeal from a decision by the Regional Director, Gulf of Mexico OCS Region, Bureau of Safety and Environmental Enforcement, denying requests for departures or approval of alternate procedures in the decommissioning of offshore wells and facilities on Outer Continental Shelf oil and gas lease. OCS-G 4935.

Affirmed.

1. Outer Continental Shelf Lands Act: Decommissioning;
Outer Continental Shelf Lands Act: Oil and Gas Leases

When BSEE decides whether to grant departures or approve alternate procedures for plugging and abandoning offshore wells and for preventing and controlling pollution, its decision must have a rational basis that is stated in the decision and supported by facts of record demonstrating it is not arbitrary, capricious, or an abuse of discretion. An appellant challenging such a discretionary decision must show, by a preponderance of the evidence, that the decision is based on an error of law, a material error of fact, or that the decision-maker failed to give due consideration to all relevant factors and act on the basis of a rational connection between the facts found and the choice made. A mere difference of opinion regarding proper management of offshore lands and resources does not show error or otherwise justify reversing a BSEE decision.

APPEARANCES: Malinda Morain, Esq., and Michael L. Beatty, Esq., Denver, Colorado, and Lawrence Jensen, Esq., Washington, D.C., for appellant; Eric Andreas, Esq., Office of the Solicitor, U.S. Department of the Interior, Washington, D.C., for the Bureau of Safety and Environmental Enforcement.

OPINION BY ADMINISTRATIVE JUDGE JACKSON

The Taylor Energy Company LLC (Taylor) appeals from a Decision by the Regional Director, Gulf of Mexico OCS Region, Bureau of Safety and Environmental Enforcement (BSEE), dated May 11, 2015 (Decision). BSEE denied Taylor's request for departures or approvals of alternate procedures in the decommissioning of 16 offshore wells (Wells) associated with Outer Continental Shelf (OCS) oil and gas lease OCS-G 4935 (Lease),¹ which was in Mississippi Canyon Block 20 (MC-20), in the Gulf of Mexico, approximately 10 miles south of the terminus of the Mississippi River.²

SUMMARY

Taylor has not carried its burden to demonstrate an error of fact or law in BSEE's denial of its requests to avoid drilling intervention wells in order to permanently plug and abandon 16 wells on the Lease, allow contaminated sediments to remain on the seafloor in the area, and authorize its use of an undersea containment system to capture unanticipated hydrocarbon releases in the area. We therefore affirm BSEE's Decision.

BACKGROUND

Taylor is the former lessee and operator of the Lease, which was terminated on June 28, 2007. In 2004, when Hurricane Ivan entered the Gulf of Mexico, the Lease had 18 producing wells and 7 shut-in wells. Taylor does not deny its responsibility to decommission the Wells under the Outer Continental Shelf Lands Act (OCSLA) and implementing rules,³ but it objects to BSEE's denial of requests to depart from plugging and abandonment (P&A) requirements because of unprecedented circumstances and unforeseen events that followed in the wake of Hurricane Ivan. Hurricane Ivan created a massive undersea mudslide in Mississippi Canyon that toppled Platform A and pushed it roughly 500 feet down slope, buried its wells and conductors in 100 feet of mud, and resulted in a continuing oil sheen on the surface.⁴ Taylor asserts this oil sheen represents

¹ The 16 wells are denoted as A-2, A-3, A-6, A-7ST, A-8, A-9ST, A-12/A-12D, A-14ST, A-18, A-20, A-22 through A-26, and A-28.

² References to BSEE include its predecessors, the Minerals Management Service (MMS) and the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE), as appropriate.

³ 43 U.S.C. §§ 1331-1356b (2012); see 30 C.F.R. Part 250, Subparts C (Pollution Prevention and Control) and Q (Decommissioning Activities); Statement of Reasons, filed July 25, 2016 (SOR) at 1, 27.

⁴ See Consensus Ecological Risk Assessment (CERA) Report, prepared for the UC by Ecosystems Management & Assoc. (Administrative Record (AR), TAY7312), at 1-3,

an average hydrocarbon release of “about 3.1 gallons per day” that disperses naturally, is unlikely to reach the shoreline, and poses no risk to the shore or undersea environment.⁵

Taylor is required by 30 C.F.R. § 250.1701(a) and other rules to decommission the Lease and “permanently plug all wells,” which generally requires isolating hydrocarbon zones, protecting freshwater aquifers, and preventing fluids from migrating to the sea floor.⁶ And if “pollution occurs as a result of operations conducted by or on behalf of the lessee,” the control and removal of the pollution must be to BSEE’s satisfaction, “subject to modification when directed by the District Manager.”⁷

Taylor initially attempted to uncover the buried wellheads and conductors so they could be permanently plugged and abandoned, but it was unable to do so because the excavated area could not be kept open.⁸ The United States Coast Guard, Region VI (USCG), through its on-scene coordinator, established a Unified Command (UC) for managing the Federal response on MC-20, which included USCG, BSEE, the Bureau of Ocean Energy Management (BOEM), and Taylor.⁹ After extensive independent analysis by the UC, BSEE considered the feasibility of conducting P&A operations on all 25 wells at the site, found “it is technically infeasible to conduct standard P&A operations,” and prepared an environmental assessment to consider the environmental risks and impacts

14-15; MC20 Final Risk Assessment and Cost Estimate (FRACE) Report, prepared for the UC (AR, TAY9115), at 9; Decision at 1; SOR at 2-3; Answer filed Oct. 28, 2016, at 3; Taylor Reply filed Nov. 14, 2016, at 3.

⁵ FRACE Report at 9; *see id.* (“The rate of release equates to approximately one drop of oil being released each minute from a two square foot area on the mud line.”); CERA Report at 1 (“average observed sheen volume of about 3 gallons . . . per day”); Decision at 1; SOR at 4.

⁶ 30 C.F.R. § 250.1710 (When must I permanently plug all wells on a lease); *see id.* §§ 250.1703 (What are the general requirements for decommissioning?) (“Conduct all decommissioning activities in a manner that is safe, does not unreasonably interfere with other uses of the OCS, and does not cause undue or serious harm or damage to the human, marine, or coastal environment.”), 250.1714 (What must I accomplish with well plugs?).

⁷ *Id.* § 250.300(a)(1).

⁸ *See* SOR at 6; Answer at 4; FRACE Report at 24-25 (“[D]redging attempts resulted in immediate back-flow of adjacent sediments into the previously excavated area. . . . [C]ontinued dredging attempts proved futile[.]”).

⁹ *See* SOR at 6 (“All work at the site and the studies conducted since [October 2007] have been done under the direction and with the agreement of the Unified Command.”); 40 C.F.R. Part 300 -- National Oil and Hazardous Substances Pollution Contingency Plan, Subpart B -- Responsibility and Organization for Response, 40 C.F.R. § 300.105(d).

of a departure from or approval of alternate procedures to meet P&A requirements.¹⁰ Based on its EA, BSEE decided to allow the drilling of intervention wells to intercept existing wells and set deep plugs as “an alternate procedure and departure for 25 wells to the detailed specifications in 30 CFR 250.1714 and 30 CFR 250.1715.”¹¹ BSEE’s decision was conditioned on its approval of Taylor’s application(s) for a departure or approval of alternate procedures that must also “address the use of best available and safest technology and [provide] detailed information on setting of plugs to meet the objectives of 30 CFR 250.1714 to the maximum extent practical.”¹²

While BSEE was preparing the EA, it was negotiating and reaching agreement with Taylor for a lease-specific abandonment account to provide a secure source of funding for decommissioning undertaken by Taylor or by BSEE (in the event of default by Taylor).¹³ Each decommissioning obligation was then identified and addressed in their Trust Agreement and its Schedule A (e.g., plug and abandon 25 wells for \$25,500,000 per well, as estimated by BSEE, with a total decommissioning cost for the Lease facilities estimated at \$666,280,000).¹⁴ Their Bond Agreement identifies the funding deposits required of Taylor and when they must be made, beginning with an initial deposit of \$400,000,000, followed by supplemental deposits through September 2009, for a total of \$666,280,000.¹⁵

BSEE Approval of Alternate Procedures and Departures for Plugging and Abandonment

As specified in BSEE’s April 2008 decision, Taylor submitted a decommissioning plan of operations for BSEE’s approval on May 19, 2008.¹⁶ The Plan was to drill intervention wells for nine “high risk” wells that “may be polluting or have the highest

¹⁰ Environmental Assessment for Approval of Alternate Procedures or Departures from MMS Regulatory Requirements (EA) (AR, TAY4704), at 6; *see also* Finding of No Significant Impact (FONSI).

¹¹ BSEE Decision dated Apr. 30, 2008 (AR, TAY4958), at 2.

¹² *Id.*; *see* EA at 3-6; *but see* FRACE Report at 10 (“Well Intervention at MC 20 entails a multitude of inherent technical, operational and environmental risks. Simply put, these risks stem from drilling new wells in a tangled web of mangled well bores and possibly triggering an environmental event. Such an undertaking had never been attempted, let alone implemented, before.”).

¹³ *See* 30 C.F.R. § 556.904 (Lease-specific abandonment accounts).

¹⁴ *See* Trust Agreement, dated Mar. 19, 2008 (AR, TAY5118); 30 C.F.R. § 556.904(a)(2) (“You must fully fund the lease-specific abandonment account to cover all decommissioning costs as estimated by BSEE within the timeframe the Regional Director prescribes.”).

¹⁵ *See* Bond Agreement, dated Mar. 19, 2008 (AR, TAY5142).

¹⁶ Plan of Operations - MC20A Decommissioning (Plan) (AR, TAY4639).

potential to pollute, by allowing the flowing, leaking, or seeping of hydrocarbons.”¹⁷ Of the remaining 16 wells, Taylor maintained that only one or two were capable of flowing hydrocarbons, whereas a BSEE study found 4 wells had the potential to flow.¹⁸ Although Taylor claimed that none of the other wells would flow hydrocarbons because their bottom hole pressures could not overcome seawater and/or sediment plugs in the wellbores,¹⁹ a BSEE study found the reservoir pressures used in the Taylor studies “cannot be relied upon with certainty,” plugging by sediments “cannot be determined with certainty,” and that any well is “very likely to produce natural seepage of oil.”²⁰

Taylor completed drilling all nine intervention wells in accordance with its approved Plan by March 2011.²¹ BSEE reports that Taylor used containment domes to collect and dispose of oil plumes from two of the wells being plugged; one plume was eliminated and the other was virtually eliminated (*i.e.*, it released “slightly over 1 bbl.” of oil in 15 months).²² Nonetheless, BSEE asserts “an oil sheen still appears on the surface each and every day of the year,”²³ and while it does not know where the oil causing the sheen is coming from, it could not rule out the possibility that it was coming from one or more of the Wells.²⁴

¹⁷ Decision at 2 n.3; *see* SOR at 7 (“[Taylor drilled] intervention wells the nine wells that had been determined to have the potential for natural flow.”); *see also* FRACE Report at 30-31, 34-35.

¹⁸ *See* Decision at 2; SOR at 21-22; Reservoir Study and Flow Assessment of Mississippi Canyon Block 20, William M. Cobb & Assoc. (Cobb Flow Assessment) (AR, TAY119); Petroleum Engineering Study and Flow Assessment, Platt, Sparks & Assoc. (Platt/Sparks Flow Assessment) (AR, TAY11336); Cobb Flow Assessment at 2 (only one well would flow); Platt/Sparks Flow Assessment at 4 (2 wells could flow under optimal conditions); *but see* Evaluation of Cobb Report by Kevlar & Assoc. (Kelkar Evaluation) (AR, AY12482) at 4.

¹⁹ *See* SOR at 22-23; FRACE Report at 34-37 (citing Analysis of Influx Through GLMS, Boots and Coots Services (AR, TAY3622) and Analysis of Seawater Leakage and Solids Build-Up, Boots and Coots Services (AR, TAY3680)), 58-59.

²⁰ Independent Risk Assessment Services on Mississippi Canyon Block 20, Stuart Wright Risk Assessment (Wright Risk Assessment) (AR, TAY10457) at 14, 15.

²¹ *See* SOR at 7; Answer at 4 (“[T]he ninth intervention well was completed in March 2011”); CERA Report at 17-18; FRACE Report at 42-43.

²² CERA Report at 18; *see id.* at 19; FRACE Report at 9, 11, 57-58, 71, 74-78, 85-86; Wright Risk Assessment at 103.

²³ Answer at 5 (citing United States’ Views on the Status of Taylor Energy Company’s Obligations at Well Site MC-20 and Taylor Energy’s Ongoing Oil Spill (US Views), May 14, 2015 (AR, TAY1635)); *see* US Views at ¶2 (“If left unchecked, the oil discharge from the well site could continue for 100 years or more.”).

²⁴ *See* Thomas Meyer (BSEE engineer) email dated Sept. 2, 2011 (AR, TAY2444).

Meanwhile, excavation studies concluded that removing contaminated sediment would pose a greater environmental risk than the benefit to be achieved and was not feasible because the excavated area would be “80 square miles and the dredge volume would be 50,000,000,000 (billion) cubic yards of sediment.”²⁵ Taylor therefore proposed to leave sediments in place and allow natural sedimentation to form a perpetual cap over the contaminated sediment.²⁶ BSEE considered the environmental consequences of Taylor’s proposal in its Site-Specific EA, which concluded the proposal was not likely to significantly impact the human environment, and that “by leaving the contaminated MC20 soils in place and allowing natural sedimentation to cover the material, exposure rates will decrease over time and serious concerns related to excavation/transport of the sediments through the water column can be avoided.”²⁷

By the summer of 2011, final decommissioning decisions were yet to be made for the remaining 16 Wells and contaminated sediments on the Lease.²⁸

Determining Requirements for Remaining Wells and Sediments

USCG established two Work Groups under the auspices of the UC on March 15, 2012, which were composed of experts from USCG, BSEE, Taylor, and the National Oceanic and Atmospheric Administration.²⁹ The Well Review Work Group examined the risks of drilling additional intervention wells or leaving unplugged wells in place and concluded that “well intervention would result in either a higher probability of an adverse environmental event or a worse consequential environmental event, or both” for all 16 remaining wells.³⁰ The Sheen Source Work Group found “more than one source” was responsible for the sheen, “releases occur on both an episodic and relatively continuous basis,” with impacts generally comparable to those from natural seeps, and that while natural sedimentation was “capping” contaminated sediments and could mitigate effects, there was no consensus on how long that process could take.³¹

CERA Workshops were organized under the auspices of the UC in May and June 2013, which included Federal, state, and private experts and that were to build on progress made by the 2012 Work Groups in assessing environmental impacts of drilling

²⁵ Answer at 8 (citing FRACE Report at 25-26); FRACE Report at 24-26.

²⁶ See Site-Specific Environmental Assessment (SSEA), Sep. 10, 2009 (AR, TAY11703), at 4.

²⁷ *Id.* at 10.

²⁸ See FRACE Report at 43; SOR at 7; Answer at 4.

²⁹ See CERA Report at 18-19.

³⁰ FRACE Report at 53; see CERA Report at 19.

³¹ CERA Report at 20.

additional intervention wells and removing contaminated sediments for on-shore disposal.³² Consensus was reached on three issues: (1) dredging and removal or capping contaminated sediments was impractical and could have adverse impacts “from increased releases and resuspension of sediments and contaminants”; (2) no additional intervention wells should be drilled because the ecological risk of drilling those wells outweighed any ecological benefits from plugging the Wells; and (3) continued hydrocarbon release from MC-20 poses a low risk to resources in the vicinity and “no exposure risk to resources outside the local area.”³³ The CERA Workshops recommended against drilling any additional intervention wells based on the limits “of current technology” or removing contaminated sediment.³⁴

USCG established the MC-20 Incident Response Cost Estimate Working Group under the auspices of the UC on November 27, 2013, to develop a cost estimate for incident response activities to address residual risk from oil discharged at MC-20. BSEE established the MC-20 Risk Analysis and Worst-Case Discharge Working Group on January 13, 2014, which was to operate under the auspices of the UC and develop a worst-case discharge scenario that accounted for all wells at the MC-20 site.³⁵

In order to resolve remaining decommissioning issues, UC convened a two-day FRACE Workshop in March 2014.³⁶ The UC Summary for that workshop stated:

Since the CERA process concluded, additional study and analysis has confirmed that the risk of future discharges and associated response cost are minimal. In this case, the best course of action to bring this decade-long response to a reasonable and responsible conclusion is to provide the necessary resources to allow the government to remain vigilant

³² See *id.* at 1-2.

³³ *Id.* at 40; see *id.* at 41.

³⁴ *Id.* at 39; see *id.* at 41 (“The risk exists because oil continues to be discharged. It is considered low risk because of low historic discharge volumes, unlikely shoreline exposure, chemistry of oil, resiliency of exposed species, natural dispersion and degradation.”).

³⁵ See FRACE Report at 15, 15-17, 18-19; see also Analysis of Discharge Scenario Risks from Offshore Wells - Perspectives on Taylor Energy MC-20A Discharge Scenarios, Mar. 14, 2014 (AR, TAY9538), at 9-15 (worst-case spill would contribute up to 0.02% of annual hydrocarbon seepage into the Gulf of Mexico and 0.04% to 0.07% of total hydrocarbon input into the Gulf of Mexico from all sources); Analysis of Potential Response Costs and Impacts Associated with Hypothetical Future Releases from MC-20A Wells, Mar. 12, 2014 (AR, TAY9744), at 10-11 (cost estimate for worst-case discharge (3.8 barrels per day for 30 days) ranges from \$6.1 to \$17 million).

³⁶ See SOR at 14; Answer at 12.

and prepared should a discharge occur but not to take any affirmative action which would cause more harm than potential good.

There are already three important findings and recommendations that have been reached by group consensus, confirmed by independent experts, endorsed by the participants in the Consensus Ecological Risk Assessment Workshop, and reconfirmed by Unified Command Task Forces and Workgroups. These three findings and recommendations, taken together, provide the basis for all further recommendations from the FRACE Workshop.

The three findings and recommendations that should no longer be at issue are:

1. Undertaking any further intervention activity on any well or producing zone in which a well bore currently exists would create far more environmental risk than any potential environmental gain. For that reason, no further intervention activity is recommended.

2. Undertaking any soil remediation option would likely result in far more environmental harm than benefit. It is not possible to excavate the contaminated soil and disposal of this material would pose unjustifiable environmental risk. From a net environmental benefits perspective, the residual oil/mud mixture should be left undisturbed. The natural attenuation process will consist of burial due to sediment inputs from the Mississippi River, and biodegradation.

3. Unified Command believes and a Consensus Ecological Risk Assessment Workshop with broad participation concurs that there are no quantifiable adverse environmental impacts associated with the current status of the MC-20 site. The environmental impact is best described as “negligible.”

Taylor Request for Departures from Applicable Requirements

Taylor submitted a request for departures from or approval of alternate procedures on March 21, 2014, for plugging and abandoning its 16 remaining wells, addressing contaminated sediments, and approval of an undersea containment system.³⁷ It did so with the understanding that the UC would be discussing the basis of its request at their upcoming FRACE workshop.³⁸ Taylor requested that BSEE: (1) excuse Taylor

³⁷ See Taylor Request (AR, TAY1644) at 1-2.

³⁸ See *id.* at 2.

from drilling intervention wells to plug and abandon the Wells “because of the serious risks associated with intervention and the extraordinary operational costs outweigh any potential benefits”; (2) allow Taylor to leave contaminated sediments in place because doing so “would be preferable to the increased exposure risks that would result from excavation and transport of excavated contaminated materials through the water column”; and (3) allow Taylor to capture unanticipated leaks, spills, or releases from 2 Wells with only a minimal potential for flowing hydrocarbons because the other 14 Wells are “incapable of flowing in their current state.”³⁹

BSEE denied Taylor’s request by decision dated May 11, 2015. It refused to excuse Taylor from drilling additional intervention wells because “hydrocarbons are still escaping the sea floor and entering the environment” and because Taylor has provided “no clear evidence to support its assertion that the hydrocarbons are coming from contaminated sediment and not from leaking or unplugged wells.”⁴⁰ For similar reasons, it declined to allow “contaminated sediments to remain permanently in place without the option to require Taylor to remove [them] at some point in the future should such removal become necessary.”⁴¹ BSEE rejected Taylor’s use of a containment system, “in lieu of further decommissioning,” because Taylor did not demonstrate its system was “capable of preventing further continuing discharges of oil from the site” or providing “a level of environmental protection that equals or surpasses current BSEE requirements.”⁴²

In its decision, BSEE did not require Taylor to drill any intervention wells or remove any contaminated sediment. Nor did BSEE prevent Taylor from using an undersea containment system to capture spills, leaks, or other hydrocarbon releases in the area.⁴³ But BSEE denied Taylor’s requests because of “the continuing discharge of oil from the MC-20 site, Taylor’s inability to contain the discharge, and the possibility that future plugging and abandonment work and/or the removal of contaminated

³⁹ *Id.* at 3 (citing SSEA at 9).

⁴⁰ Decision at 3; *see id.* (“Further, there is the possibility that, in this unstable region, mud could be removed from the area, rather than deposited, leaving less mud and sediment over any open/leaking/flowing unplugged wells.”) (“[T]he integrity of each part of each of the 16 wells is unknown, and weaknesses or failures of any of these parts could cause, and may now be causing, leaks, seeps, or flows of hydrocarbons.”), 3-4 (“[T]here is no way to know whether, in the future, hydrocarbons in significant quantities could flow from the 16 unplugged wells, or even from the 9 wells for which intervention wells were drilled.”).

⁴¹ *Id.* at 5 (citing 30 C.F.R. § 250.300); *see* 30 C.F.R. § 250.300 (“Immediate corrective action shall be taken in all cases where pollution has occurred.”).

⁴² Decision at 4, 5.

⁴³ *See id.* at 5.

sediments[] may be required[.]”⁴⁴ This appeal timely followed and is now ripe for our review.

DISCUSSION

[1] BSEE has discretion under 30 C.F.R. §§ 250.142 and 250.141 to grant departures or approve alternate procedures for plugging and abandoning offshore wells and for preventing and controlling pollution.⁴⁵ The Board has long held that an exercise of agency discretion must have a rational basis that is stated in the decision and supported by facts of record demonstrating that it is not arbitrary, capricious, or an abuse of discretion. On appeal, an appellant’s burden is to show with a preponderance of the evidence that the decision is based on an error of law, a material error of fact, or that the decision-maker failed to give due consideration to all relevant factors and act on the basis of a rational connection between the facts found and the choice made.⁴⁶ A mere difference of opinion regarding the proper management of the Federal offshore lands and resources does not show error or otherwise justify our reversing such a bureau decision.⁴⁷

Taylor made three requests for relief from applicable requirements: no further operations to plug and abandon the Wells; no removal of contaminated sediment; and if no additional plugging and abandonment operations are required, allow it to use a subsea containment system to capture unanticipated releases from the Wells. Each request was denied by BSEE and appealed by Taylor.

I. BSEE Had a Rational Basis for Denying Taylor’s Request for Relief from P&A Requirements.

Taylor challenges BSEE’s assessment of the potential flow of hydrocarbons from the Wells as a basis for denying its request for a departure from P&A requirements. Taylor claims the expert analyses in the FRACE and CERA Reports show the Wells have little or no potential for hydrocarbon flow and that BSEE’s rejection was based on

⁴⁴ *Id.*

⁴⁵ See 30 C.F.R. §§ 250.142 and 250.141 (“Any alternate procedures . . . must provide a level of safety and environmental protection that equals or surpasses current BSEE requirements.”).

⁴⁶ See, e.g., *Chevron U.S.A. Inc.*, 192 IBLA 234, 238-39 (2018); *WillSource Enterprise, LLC*, 190 IBLA 225, 228-29 (2017); *High Country Estates*, 190 IBLA 123, 126 (2017); *Yates Petroleum Corp.*, 188 IBLA 321, 328 (2016); *James R. Stacy*, 188 IBLA 134, 135 (2016); *Eric Carlson d/b/a Breckenridge Adventure Tours*, 186 IBLA 319, 322 (2015); *Mark Patrick Heath*, 175 IBLA 167, 176 (2008).

⁴⁷ See, e.g., *Rainer Huck*, 168 IBLA 365, 395 (2006).

nothing more than speculation, which Taylor argues cannot provide a rational basis for BSEE's decision and is not supported by the record.⁴⁸ Taylor identifies 5 issues on which it contends BSEE erred in denying its request for relief from P&A requirements: (1) the source of hydrocarbons causing a sheen at MC-20; (2) the potential for hydrocarbon flow in the Wells; (3) gravity separation and sediment plugging in the wellbores; (4) the potential for failure of subsurface safety valves and other well parts; and (5) the potential need to disturb contaminated sediments in the future.⁴⁹ We address each issue separately below.

1. Source of Hydrocarbons Causing a Sheen on the Surface

Hydrocarbons are leaking from the seafloor at the MC-20 site, which may not comply with BSEE decommissioning rules.⁵⁰ Taylor claims these hydrocarbons are “exclusively being released from the contaminated sediments at the site” and are not being released from its wells.⁵¹ BSEE counters that experience has not shown that contaminated sediment is not the only source of hydrocarbon releases into the environment because the rate of release since the last intervention well was completed 5 years ago “has remained consistent.”⁵² Moreover, based on monitoring results from September 2014 through May 2015, BSEE, BOEM, and USCG announced to the public:

The specific sources of discharge at the [MC-20] well site are not fully known. However, because the discharge volume is greater than can reasonably be accounted for by oil released from sediment only, oil most likely emanates from one or more of the 25 wells and from oil from the well site that is moving up and out of the sediment.^[53]

⁴⁸ See SOR at 17.

⁴⁹ See *id.* at 17-23; see also *id.* at 24-25, 26 (“BSEE is refusing to abide by the considered opinions of its own experts, and is refusing to accept the conclusions that the best science available has reached about leaving the sediments in place, even though it does not dispute those conclusions.”), 26-27.

⁵⁰ See 30 C.F.R. §§ 250.1710 (“You must permanently plug all wells on a lease”) and 250.1714 (“You must ensure that all well plugs [p]rovide downhole isolation of hydrocarbon . . . and [p]revent migration of formation fluids within the wellbore or to the seafloor.”).

⁵¹ SOR at 4; see *id.* at 18-20.

⁵² Answer at 19; see *id.* at 20 (“[C]onsistent (and possibly increasing) discharges of oil into the Gulf from the MC-20 site . . . refute Taylor’s theory that the oil is coming from the sediments and will abate over time due to sedimentation.”).

⁵³ U.S. Views at 1.

We do not doubt hydrocarbons are coming from contaminated sediment, but we do not find that the record shows they are only coming from sediment and not from the Wells.⁵⁴ In other words, we do not find Taylor has shown error in BSEE concluding that hydrocarbons may also be coming from the Wells.

Taylor argues that core samples confirm the hydrocarbon source is “*not a leaking well*” because a well would cause the concentration of hydrocarbon to be more uniform throughout [the depth sampled] or have the highest concentration at the deeper core depths.”⁵⁵ But Taylor overlooks the fact the samples were taken only to a depth of 5 feet, while the sediment overlying buried wells ranged from 69 to 150 feet in depth. Since the samples may not be representative of the hydrocarbons throughout the sediments, BSEE did not rule out that there could be a more uniform concentration of hydrocarbons (or even higher concentrations nearer unplugged wells), which would indicate that the Wells could be a source of leaking hydrocarbons.

Taylor further claims the “chemical fingerprint” of the sheen indicates “no homogenous source” or “recharge” of the soil contamination by a leaking well,”⁵⁶ but it fails to explain how the chemical composition of the sheens is not consistent with leaking wells (e.g., well(s) leaking from different formations) or why sheens are continuing despite intervention wells and deep well plugs, plus use of Taylor’s containment system.⁵⁷ Taylor notes: “Secondary release of hydrocarbons contained in the sediments is the *dominant* contributor to the sheen.”⁵⁸ However, even if this is true, this is not the same as a finding that a release from the sediments is the only source and exclusive contributor to the sheen at the site, particularly since the CERA Report concluded “there appears to be more than one source for the sheens observed.”⁵⁹

Taylor has not demonstrated that hydrocarbons are coming exclusively from contaminated sediment. It is undisputed that many of the Wells remain open for hydrocarbon flow, two are capable of flowing, and most are capable of leaking due to

⁵⁴ See CERA Report at 1; FRACE Report at 76-78.

⁵⁵ SOR at 18 (emphasis added).

⁵⁶ *Id.* at 18, 22-23.

⁵⁷ See Sheen Source Analysis Overview at 4.

⁵⁸ SOR at 19 (quoting Sheen Source Analysis Overview at 21) (emphasis added).

⁵⁹ CERA Report at 20; see Sheen Source Technical Work Group Results (AR, TAY7288) at unpaginated (unp.) 19 (“Based on the evidence obtained (at completion of work group efforts), what is the true source of the sheen -- leaking wells vs sediment contamination? *General Consensus* - Can’t Yet Answer (Newest information suggest[s] that there [is] more than one source for the sheens observed.)”).

corrosion, which we find justifies BSEE's assertion that the Wells "may be leaking."⁶⁰ We do not find the record rules out the potential for hydrocarbon flow from the Wells as a cause of the sheen in MC-20.

2. *Potential for Hydrocarbon Flow in the Wells*

Taylor claims BSEE improperly rejected the exhaustive analysis of the Risk Workgroup on well pressure, reservoir conditions, casing, cementing, and other conditions that could affect the Wells' potential to release hydrocarbons.⁶¹ It similarly claims BSEE rejected the ERC conclusion that the probability of a flow event in any Well is infinitesimally small (0.000574%/year or 5.7%/100 years), and also the Cobb and Platt/Sparks' conclusions that 14 Wells are not capable of flowing and the two theoretically capable of flowing are not likely to flow.⁶²

The record provides no basis for an accurate prediction of the Wells' future flow of hydrocarbons (or lack thereof). ERC calculated a small probability of future hydrocarbon flow, but it did not rule out a flow event, and while the Risk Workgroup concluded the Wells had little or no potential to produce hydrocarbons, they could not rule out future flows of worst-case discharges.⁶³ The Wright Risk Assessment suggests a possible difference of opinion, concluding that total hydrocarbon releases so far exceeded total tubing volumes on all 25 wells, which shows they "are still a source of hydrocarbon discharge" and "could be a direct consequence of uncontrolled hydrocarbon flow up the annular in all 25 MC 20A wells."⁶⁴ Taylor has failed to offer any convincing argument or supporting evidence establishing that the sheen is not at all attributable to ongoing hydrocarbon releases from the Wells. We therefore conclude BSEE did not err in finding the Wells are capable of releasing or leaking hydrocarbons, now and in the future, particularly since there is a continuing sheen on the surface of MC-20.

⁶⁰ Answer at 18 (citing Analysis of Discharge Scenario Risks from Offshore Wells, Environmental Research Consulting (ERC Risk Analysis) (AR, TAY9538)); CERA Report at 37 ("[M]ultiple well conduits may remain open for potential flow"), 40; FRACE Report at 56 ("Essentially, all the annuli and tubing above the mud-line can be considered 'open-ended' in the area where the wellheads were originally installed."), 98.

⁶¹ See SOR at 19-20 (citing FRACE Report at 47-49).

⁶² See *id.* at 20-22 (citing ERC Risk Analysis at 89-90; and Platt Sparks Flow Assessment at 4, 43).

⁶³ See Answer at 11 ("While [ERC] concluded that the overall likelihood of a spill from any one of these wells was very small, [it] . . . could not discount it entirely").

⁶⁴ Wright Risk Assessment at 16, 17.

3. Gravity Separation of Hydrocarbons and Sediment Plugging in the Wellbore

Taylor argues BSEE improperly rejected expert analysis showing the Wells are not likely to fill with seawater and cause lighter hydrocarbons to migrate to the top of the wellbores (gravity separation) and be released into the environment to cause a sheen.⁶⁵ However, Taylor did not show gravity separation was not occurring, only that it was unlikely. Thus, we do not find Taylor has shown by argument or evidence that gravity separation could not be a cause of the sheen. Nor are we persuaded BSEE erred in considering this possibility when it decided not to grant Taylor's request to be excused from P&A requirements.

Taylor also argues that BSEE improperly rejected expert analysis showing there were 12 low pressure wells at the time of Hurricane Ivan and that each is "likely plugged with an influx of seawater and sediment."⁶⁶ We do not find Taylor has demonstrated sediment plugs are present in these 12 wellbores or that they would be a satisfactory substitute for plugging wells with cement.⁶⁷

4. Potential for Failure of Subsurface Safety Valves and Other Well Parts

Taylor contends BSEE improperly rejected the ERC conclusion that the probability of hydrocarbon flow from any of the Wells due to a failure of subsurface safety valves, other well parts, or some other reason was "very low" (i.e., once in 1,742 years).⁶⁸ But since we find no evidence ERC (or any other expert) was aware of the current status of the subsurface safety valves and other parts of the Wells after the catastrophic destruction of their wellbores and subsurface facilities, we conclude they simply were not in a position to assess the probability of hydrocarbon flow *based on the mechanical integrity of these Wells*.⁶⁹ Nor are we persuaded that BSEE erred in considering this issue when deciding whether to grant Taylor's request for relief from permanent P&A requirements.

⁶⁵ See SOR at 22-23 (citing Cobb Flow Assessment at 128).

⁶⁶ *Id.* (citing Considerations for Sediment Plugging and Risk of Re-entering Plugged Wells, Boots & Coots Services (Boots & Coots Sediment Study) (AR, TAY9898); see Boots & Coots Sediment Study at unp. 7 (4 of 9 intervention wells showed "evidence of the existence of a plug").

⁶⁷ See 30 C.F.R. § 250.1715 (How must I permanently plug a well?).

⁶⁸ SOR at 23 (citing ERC Risk Analysis at 9).

⁶⁹ See Wright Risk Assessment at 9 ("The conductor pipe and casing were buried beneath 69[feet] to 150[feet] of sediments making it inaccessible and *internal conditions of the well could not be assessed*" (Emphasis added)).

In sum and as detailed above, we find no error in BSEE's consideration of these issues, which each had a rational basis that is supported in the record. But our affirming the Decision does not mean Taylor must begin drilling intervention wells to plug and abandon the Wells, only that it is not now relieved of its obligation to do so. We are not unmindful that the environmental costs currently outweigh the environmental benefits of additional intervention wells and that the rule at 30 C.F.R. § 250.1703(f) requires all decommissioning activities to be conducted in a manner that "does not cause undue or serious harm or damage to the human, marine, or coastal environment." However, we disagree with Taylor's view that this issue has been decided, once and for all, because estimated environmental costs currently outweigh anticipated environmental benefits.⁷⁰ This is because we do not find BSEE is required to grant a departure request or approve alternate procedures based on the current state of knowledge or that it cannot defer granting a request to wait for advances in technology or a greater understanding of the undersea environment (*e.g.*, greater certainty on the cause of continuing hydrocarbon releases that result in the sheen). Taylor claims BSEE's decision must be based on the "current record" and that doing otherwise is arbitrary and capricious.⁷¹ We find nothing in OCSLA or its implementing rules that prevents BSEE from deferring its decision, particularly since it is doing so with the concurrence of USCG and BOEM.⁷²

Stuart Wright recommended to BSEE and Taylor that they "consider additional research studies for further improvements to the P&A of MC 20A Wells using the IW [intervention well] strategy, to include methods to allow the permanent isolation of all annuli."⁷³ To preclude BSEE from awaiting changes in technology and a better understanding of the undersea environment improperly constrains its statutory and

⁷⁰ See Reply at 3 ("[T]he experts, after years of study, have determined [permanent plugging] cannot be safely conducted."), 5 ("BSEE can no longer rationally require that the sheen be addressed through well plugging.").

⁷¹ See *id.* at 5.

⁷² See U.S. Views at 2 ("Any assertions regarding the availability or unavailability of 'existing' technology to completely stop and contain the ongoing discharge do not resolve the issue as to whether this discharge can be stopped or contained in the near or more distant future based on improved technology."); BOEM Fact Sheet at unp. 2 ("Future work to be performed . . . will be determined based on site conditions and the availability of applicable technology. . . . Significant uncertainty exists about future events, including discharge sources, cross-flows, pressure recharge in the oil reservoirs, evolving technology, and suitable remedial measures. . . . There is still more that can be done by Taylor to control and contain the oil that is discharging from the MC-20 site. BSEE and BOEM are committed to working with the Unified Command to contain and stop the ongoing oil spill.").

⁷³ Wright Risk Assessment at 20; see *id.* at 16 ("[P]hysical limitations should not be regarded as a pivotal justification *TO NOT* P&A the remaining 16 wells.").

regulatory authority over offshore well decommissioning and unnecessarily limits its overriding responsibility to protect the environment from the adverse consequences of offshore drilling and production.⁷⁴ We therefore find BSEE had a rational basis, supported by the administrative record, to decline relieving Taylor of its regulatory obligation to permanently plug and abandon the Wells at this time.

II. BSEE Had a Rational Basis for Denying Taylor's Request to Leave Contaminated Sediment in Place.

Taylor contends BSEE improperly denied its request to leave contaminated sediment in place and allow natural sedimentation to form a cap over it, claiming BSEE relied on no facts or expert opinion to overcome expert analysis in the record showing that excavating contaminated sediment was impractical, that such excavation could have adverse environmental impacts, and that the environmental risk of excavating contaminated sediment and transporting it for disposal (or capping it with uncontaminated sediment) outweighed any ecological benefits that might be obtained.⁷⁵ According to Taylor, BSEE denied its request simply “to maintain the option of requiring Taylor to remove the sediments in the indeterminate future if sediment removal becomes necessary to facilitate the use of some as yet undeveloped technology to plug the wells,” which it characterizes as mere speculation.⁷⁶

Since BSEE is not now ordering Taylor to remove or cap the sediment,⁷⁷ the environmental *status quo ante* will be maintained for the foreseeable future, regardless of the outcome of this appeal – contaminated sediment will continue to be on the seafloor and natural sedimentation will continue to accumulate over it. We find BSEE denied Taylor's request because, based on evidence contained in the record, it remains convinced that contaminated sediment poses a continuing threat to the undersea environment, which Taylor has failed to rule out, and that circumstances may change and require the removal of contaminated sediment in the future. While the SSEA found contaminated sediment was not significantly impacting the environment, it found that by leaving it in place and allowing natural sedimentation to occur, “exposure rates will

⁷⁴ See, e.g., 43 U.S.C. § 1332(6) (2012).

⁷⁵ See SOR at 24-26 (citing SSEA and CERA Report at 35, 40, 41); see also CERA Report at 35 (“Dredging options . . . are not considered practical due to sea floor sediment characteristics and could have unintended consequences from increased releases and re-suspension of sediments and contaminants.”).

⁷⁶ SOR at 25 (citing Decision at 5).

⁷⁷ See Answer at 21 (“BSEE is not presently ordering Taylor to remove the contaminated sediments.”).

decrease over time” as the sediment cap increases.⁷⁸ As noted by Federal, State, and private experts, natural sedimentation over contaminated soils would “mitigate/attenuate sheens generated by contaminated sediments,” but it would not eliminate them.⁷⁹ This source of pollution is continuing, and in any event, BSEE was not required by the National Environmental Policy Act of 1969 (NEPA) or any other law, rule, or policy to take the least environmentally damaging course of action analyzed in this or any other EA or environmental impact statement.⁸⁰

We are not faced with a BSEE decision requiring the removal of contaminated sediment, for which the environmental costs currently outweigh any environmental benefits. Thus, we need not decide whether sediment removal will cause “undue or serious harm or damage to the human, marine, or coastal environment” in violation of 30 C.F.R. § 250.1703. The present issue is simpler and more straight-forward: whether BSEE properly denied Taylor’s request to depart from its regulatory obligation to stop continuing pollution by removing contaminated sediment or approve its proposed, alternate procedure of leaving it in place without action or intervention.

Taylor regards the question of whether the sediment can be removed in an environmentally safe manner as having already been decided, once and for all.⁸¹ But we disagree. The CERA Report concluded that sediment removal “could have unintended

⁷⁸ SSEA at 10; *see id.* at 9, 13 (“[C]ontact between marine mammals and the contaminated MC20 soils is highly unlikely due to the water depths in the area.”).

⁷⁹ CERA Report at 3; *see* 30 C.F.R. § 250.300(a)(1) (“When pollution occurs . . . the control and removal of the pollution to the satisfaction of [BSEE] shall be at the expense of the lessee. Immediate corrective action shall be taken in all cases.”).

⁸⁰ *See, e.g., Backcountry Against Dumps*, 179 IBLA 148, 160-61 (2010) (“It is well established that [NEPA] . . . does not mandate the particular substantive results of agency decisionmaking, but rather imposes procedural obligations on the agency, which require that the agency *and* the public be fully informed of the environmental consequences when the agency exercises its substantive discretion to approve a proposed action: ‘If the adverse environmental effects of the proposed action are adequately identified and evaluated, the agency is not constrained by NEPA from deciding that other values outweigh the environmental costs, [in deciding to go forward with the proposed action].’ *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 350 (1989).”).

⁸¹ *See* Reply at 3 (“[T]he experts, after years of study, have determined [sediment removal] cannot be safely conducted.”), 5 (“BSEE can no longer rationally require that the sheen be addressed through . . . the removal of the contaminated sediments.”), 6 (“[T]he CERA Report conclusively demonstrates that leaving the contaminants in place provides a higher ‘level of safety and environmental protection’ than BSEE’s ‘current requirement’ of removing the sediments.”).

adverse consequences,”⁸² but it did not find those consequences were certain or even likely, either now or in the long term, only that the environmental risks of removal exceeded, by some degree, the minimal environmental benefits of removal based on the low level of continuing hydrocarbon releases into the environment.⁸³

BSEE is not required to grant a departure request or approve alternate procedures simply because Taylor believes that leaving the sediment in place is presently preferable. Nor do we find it is barred from deferring action, pending improvements in technology or a greater understanding of the undersea environment. BSEE understandably does not want to be barred from ordering the removal of contaminated sediment in the future by having authorized a departure from the regulatory requirement to remove contaminated sediments now. Given uncertainty regarding the source of the sheen, its continuing presence on the surface, and a potential need for Taylor to remove contaminated sediment in the future, BSEE elected not to absolve Taylor of its regulatory obligation to remove the source of this pollution. We find BSEE had a rational basis for denying Taylor’s request and conclude it is supported by the administrative record.

III. *BSEE Had a Rational Basis for Denying Taylor’s Request to Use an Undersea Containment System.*

Taylor claims BSEE’s denial of its request to use undersea containment systems to capture any unanticipated hydrocarbon flows from the Wells is “irrational” because Taylor was not seeking to use such systems “‘in lieu of further decommissioning’ – i.e., in lieu of further well plugging.”⁸⁴ Rather, Taylor made this request so it could use its system “to contain ‘any unanticipated’ oil leaks. . . . in recognition of its ongoing obligation to address the remaining discharge of oil at the MC-20 site.”⁸⁵ A Taylor system successfully contained most of the hydrocarbon plumes emanating from two of the wells it plugged with intervention wells. Taylor’s request was to construct four new containment systems of improved design that would be donated “‘to the Clean Gulf Associates (CGA) response inventory for any subsequent utilization at MC-20 or any other site in OCS waters.’”⁸⁶ Taylor then claims: “Viewed from this perspective, it is impossible to understand why BSEE would refuse Taylor’s offer.”⁸⁷

⁸² CERA Report at 40.

⁸³ *Id.* at 40, 41; *see* FRACE Report at 43-45, 45, 97-98, 99 (“[R]isks associated with . . . additional soil excavation efforts are greater than any benefit that could be achieved.”).

⁸⁴ SOR at 26, 27.

⁸⁵ *Id.* at 27; Reply at 6.

⁸⁶ Answer at 27 (quoting FRACE Report at 86).

⁸⁷ *Id.*

As best we can discern, Taylor's request to use an improved containment system it believes can contain hydrocarbon releases and eliminate the oil sheen was made so it could demonstrate the effectiveness of its system, which might support a future BSEE finding that its system is an acceptable decommissioning alternative for these wells.⁸⁸ But Taylor did not request permission to undertake this kind of demonstration project. Instead, Taylor's request to use an undersea containment system was part of its request for departures or approval of alternative procedures, and we affirm BSEE's denial of that request based on the current record.⁸⁹

BSEE properly concludes that Taylor has yet to show its containment system can or is likely to contain all continuing and unanticipated releases of hydrocarbons from the MC-20 site, which covers a sizeable area,⁹⁰ or that it will provide a level of environmental protection that equals or exceeds the level attainable by drilling intervention wells to plug the Wells. As explained by BSEE: "Because Taylor has failed to demonstrate that its subsea containment system is capable of controlling ongoing leaks at the MC-20 site, BSEE declines to grant a departure from the regulations to allow Taylor to rely on containment in lieu of further decommissioning."⁹¹ Moreover and in any event, we are mindful of the concern expressed in the CERA Report that "[o]ptions to reduce or eliminate flow through enhanced containment were felt to be of limited incremental value."⁹² We therefore find BSEE's rejection of this request has a rational basis that is supported by the current record.

CONCLUSION

Taylor has not carried its burden to show BSEE erred in denying its requests for departures or approval of alternate procedures. We therefore affirm the Decision.

⁸⁸ See 30 C.F.R. § 250.141(a) ("Any alternate procedures or equipment . . . must provide a level of safety and environmental protection that equals or surpasses current BSEE requirements.").

⁸⁹ *But see* SOR at 27 ("[I]f IBLA affirms BSEE's denial of Taylor's request to be relieved of its plugging obligations, IBLA need not reach the issue of the domes.").

⁹⁰ See Decision at 4-5; Answer at 22; FRACE Report at 86 ("[T]he existence of hydrocarbons in soils across a wider area in the former well bay area has been well established. . . . [T]he approximate peak exposure area . . . is 1,800 sq. ft."), 90 ("Even with the [current] containment system in operation, th[e] minimal sheen persists as a result of the slight release rate from the soils and the dimensions of exposure at the original well bay location.").

⁹¹ Decision at 4.

⁹² CERA Report at 35.

Accordingly, pursuant to the authority delegated to the Board of Land Appeals by the Secretary of the Interior,⁹³ the decision appealed from is affirmed.



James K. Jackson
Administrative Judge

I concur:



James F. Roberts
Acting Chief Administrative Judge

⁹³ 43 C.F.R. § 4.1.